Please replace the abstract paragraph at page 32, lines 1-9 with the following amended paragraphs, marked to show the changes made:

ABSTRACT OF THE DISCLOSURE

A device, method, and system for a fluid cooled micro-scaled heat exchanger is disclosed. The fluid cooled micro-scaled heat exchanger utilizes a micro-scaled region and a spreader region with a highly thermally conductive material and sized specific materials and ranges of dimensions, to yield high heat dissipation and transfer area per unit volume from a heat source. The micro-scaled region preferably comprises microchannels, but in alternative embodiments, comprises a micro-porous structure, or micro-pillars, or is comprised from the group of microchannels, a micro-porous structure and micro-pillars.